

KEEPING SHARP

Volume 1, Issue 2

Medical Waste Update



HCA

Published by Environmental Health Medical Waste, County of Orange Health Care Agency

Save & Comply

Medical waste treatment and disposal methods for Sharps Waste

During medical waste inspections, especially of Small Quantity Generators (SQGs), operators often inquire about approved and cost-effective methods for the treatment and disposal of various medical waste streams, particularly sharps (needles, etc.). Generators of medical waste may use registered hazardous waste transporters (a list of approved transporters is available from your local enforcement agency) to transport the waste. This article provides information for alternative treatment technologies on sharps waste that have been approved by the California Department of Health Services (DHS), and are particularly applicable to those facilities that generate only sharps waste. The alternative treatment and disposal methods do not require a treatment permit or additional approval from the local enforcement agency. Please note that the information provided in this article about sharps treatment/disposal methodologies does not constitute an endorsement or recommendation by the County of Orange or the Health Care Agency, Environmental Health Division. Anyone interested in the products described should use his/her own discretion in engaging the services of these companies.



Methods of Treatment/Disposal of Sharps Waste

Isolyser Sharps Management System (SMS): The SMS technology provides a containerized solution for the disposal of needles and other sharps from generators such as dentists, physicians, acupuncturists and veterinarians. The units are available in various sizes and are equipped with catalyst packs, labels, cap plug and "Decontaminated Solid Medical Waste" stickers.

When used properly, the containerized waste is disinfected and becomes encapsulated within the container. The treated waste container may be disposed of as solid waste. The Isolyser SMS may be purchased through medical and dental supply stores. Information on this system may be obtained by calling (800) 844-0988 or

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Waste Dictionary

Common medical waste treatment terms and what they mean to you!

Past response to the medical waste newsletter included numerous requests for the definition of some of the terms that are commonly encountered in the Medical Waste Management Act (MWMA). A few definitions are provided below. For a complete copy of the Medical Waste Management Act, visit the California Department of Health Services, Medical Waste Management Programs web site at www.dhs.cahwnet.gov/ps/ddwem/environmental/emb/medwasteindex.htm.

Common Storage Facility: is a designated accumulation area that is on-site and is used by independently operated Small Quantity Generators for the storage of medical waste prior to collection by a registered hazardous waste hauler (*H&SC §117640*). Note: Large Quantity Generators may not participate in Common Storage Facilities.

Sharps Waste: (*H&SC §117755*) any device having acute rigid corners, edges or protuberances capable of cutting or piercing. For example, hypodermic needles, hypodermic needles with syringes, blades, needles with attached tubing, syringes contaminated with biohazardous waste, acupuncture needles, root canal files, broken glass items such as Pasteur pipettes and blood vials contaminated with biohazardous waste.

Sharps Container: (*H&SC §117750*) any rigid puncture-resistant container that, when sealed, is leak-resistant and cannot be reopened without great difficulty.

Storage: (*H&SC §117765*) the holding of medical wastes (this does not include "in use" containers) at a designated accumulation area, off-site point of consolidation, transfer station, other registered facility, or in a vehicle detached from its means of locomotion.

Tracking Document: (*H&SC §118040*) the documentation required of all medical waste generators to prove that the waste has been legally transported and disposed, and to document classification as a large or small quantity generator under the MWMA. The tracking document must include (but is not limited to):

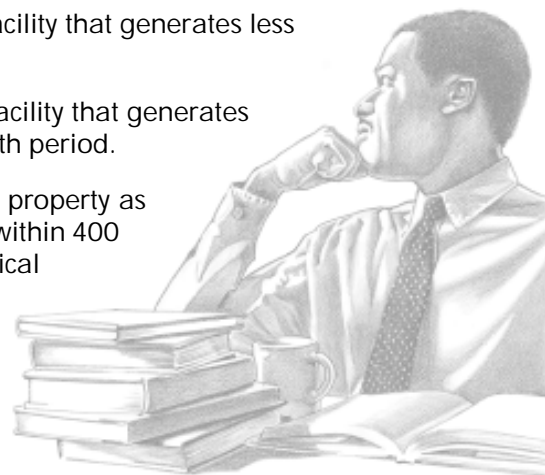
1. The name, address, phone number and registration number of the transporter.
2. The type and quantity of medical waste transported, in pounds.
3. The name, address and phone number of the generator.
4. The name, address, phone number, permit number, and the signature of an authorized representative of the permitted facility receiving the medical waste.
5. The date that the medical waste is collected or removed from the generator's facility, the date the medical waste was received by the transfer station, the registered large quantity generator or point of consolidation, if applicable, and the date the waste is received by the treatment facility.

Small Quantity Generator: (*H&SC § 117760*) any facility that generates less than 200 pounds of medical waste per month.

Large Quantity Generator: (*H&SC § 117755*) any facility that generates 200 pounds or more of medical waste in any 12-month period.

On-site: (*H&SC §117740a*) on the same or adjacent property as the generator of the medical waste. Adjacent means within 400 yards from the property boundary of the existing medical waste facility.

Treatment: (*H&SC § 117780*) any method, technique or process designed to change the biological character or composition of any medical waste so as to eliminate its potential for causing disease.



Economize, Organize!

A Common Storage Facility case study

This case study pertains to a Common Storage Facility (CSF) in Orange County that worked towards providing a unique, cost-effective solution to an often encountered problem. A CSF is any designated accumulation area that is on-site and is used by small quantity generators (generators that produce less than 200 pounds of medical waste per month) for the storage of medical waste for collection by a registered hazardous waste hauler.

During an annual medical waste inspection, it was noted that twenty-six generators contributed to this CSF and the average monthly quantity of medical waste generated was about 3000 pounds. Most medical offices produce very limited quantities of medical waste comprising mainly pounds of sharps waste. In this instance, the average of 115 lbs./month per suite suggested that we needed to have a closer look at the operations of the facility. Working closely with the CSF Management, the prospects were narrowed down to the following possibilities:

- The possibility of non-biohazardous waste, such as paper towels, paper products, articles containing non-fluid blood and other solid waste products being disposed of as medical waste.
- The possibility that among the CSF contributors were large quantity generators of medical waste (those facilities that generate 200 pounds or more of medical waste in any month of a 12-month period).

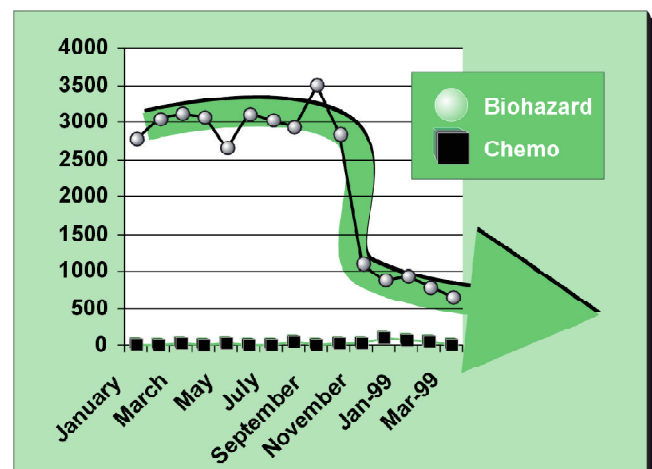
In order to determine what or who was contributing to the large quantity of medical waste, the CSF Management consulted with their medical waste transporter company and adopted a system, which proved to be both efficient and unique. The new system was discussed at a meeting called by the CSF Management with the occupants of the medical office building. This opportunity was also used to provide a refresher lecture on the Identification and Segregation of Medical Waste. A representative of the medical waste transporter delivered the lecture.

The salient features of the 'new' waste management system were:

- Issuance of separate bins to each suite (different sizes, depending upon need).
- Bar codes and labels designed by the medical waste transporter for each suite.
- Each suite was required to put the bar code labels on the bins slated for pickup by the housekeeping service.
- Each bin was scanned and the weight recorded by the hauler and weight records were provided for each suite on a monthly basis.

The following graph is evidence of the significant reduction in medical waste disposal from the CSF after the implementation of the new program. We concluded from this drastic reduction, that a lot of solid waste was being disposed of as medical waste. The reduction has led to a significant waste disposal cost-savings for the CSF manager.

In addition, one large quantity generator was also identified within the medical group and has discontinued being part of the CSF.



Graph is evidence of the significant reduction in medical waste disposal from the CSF after the implementation of the new program.

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Save and Comply!

Medical waste treatment and disposal methods for Sharps Waste (continued from page 1)

visit the Internet site at: <http://www.isolyserinc.com/IsolInc/Microtek/SMS.htm>



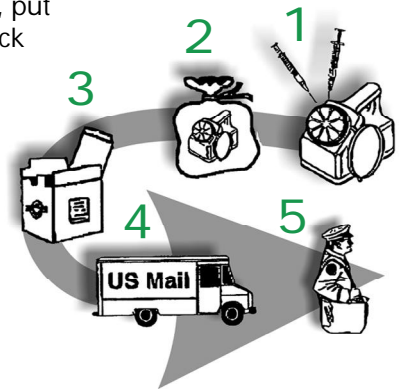
Sharp-Shield - A product of Earth-Shield: Another point of generation disposal system for sharps waste is Sharp-Shield. Proper use of the system results in the sterilization of hypodermic needles, which are encased in a solid cementitious medium. The container may then be disposed of as solid waste. For further information on this product, call (661) 322-0300 or visit the internet site at: <http://www.earth-shield.com>.

Sharps Mail Back Systems: Another convenient method to properly dispose sharps is the Mail-Back Service. Several mail-back services are approved at this time. The services of these companies usually include a securely sealed and puncture resistant sharps container; a US postal approved shipping container; a red bag and absorbent material for additional containment and a tracking slip with complete documentation. Containers are available in convenient sizes to meet the needs of the user.

When the sharps containers are full, they are properly sealed, put in the provided approved containers/cartons and mailed back via prepaid shipping. After the waste is received at the treatment facility it is treated and the customer receives a final copy of the tracking form which certifies the weight as well as the date and time that waste was received and treated.

A list of currently approved facilities follows:

- Sage-Stericycle Program - (800) 234-7869
- Integrated Environmental Systems, Inc. (510) 261-1512
- MedWaste Disposal Services "Envirosafety" - (800) 557-0541 or (707) 263-7524
- Kendall Services - (800) 878-8111
- Sharps Compliance, Inc.- 3CI Mail Sharps Disposal System (800)772-5657
- Sharps Disposal, Inc. - (800)527-0666
- Stericycle, Inc. - Sharps mail-back service (800)355-8773 -press 4
- Ventura Waste Management Sharps mail back service (800) 647-2541 or (800) 952-2909.



Needlyzer - The Needle Destroyer: Another alternative for the appropriate destruction of needle waste is the use of the Needlyzer, a product that destroys needles at the point of use. The Needlyzer utilizes heat (almost 1500°C) in the destruction of non-coated stainless steel hypodermic needles, reducing them to swarf (residue after needle destruction) that may be disposed of in the solid waste stream. The Needlyzer destroys stainless needles from 16 to 30 gauge. These include butterflies, vacutainers and tubing.



Since the Needlyzer treats only the needle, the residual syringe/hub assembly (if contaminated with blood/body fluids) must be disposed of in a red bag or a sharps container. Further information on this product maybe obtained by calling (773) 528-2652 or from the web sites at: <http://www.theneedlyzer.com/index.htm> or <http://www.needlyzer.com/needlyzer.shtml>.

Small quantity generators that generate only sharps waste may find that the above treatment and/or disposal methods are options they can consider when selecting the method that best suits their needs. ■

Leftovers A Problem?

Pharmaceutical waste disposal guidelines

Waste pharmaceuticals that meet the definition of a state regulated non-Resource Conservation and Recovery Act (RCRA) hazardous waste are now regulated under the Medical Waste Management Act (section 117747) as a waste that must be incinerated at a permitted medical waste treatment facility. Waste pharmaceuticals regulated as a federal hazardous waste (RCRA) or a radioactive waste (Radiation Control Law) cannot be managed as a medical waste, and must comply with applicable laws. In this article, waste pharmaceutical requirements listed by the Medical Waste Management Act are summarized and suggestions on how to best comply with the law are listed.

Pharmaceutical Waste to be incinerated as a Medical Waste:

- May not be put in red biohazard bags.
- Must be put into a container labeled "For Incineration Only".
- Must be transported for incineration to a permitted medical waste incinerator.
- May be stored on-site for a maximum of 90 days (if less than 10 pounds of waste pharmaceuticals is generated per calendar year, it may be stored for up to one year).

This Agency recommends the following:

1. Waste minimization - rotation of stock; don't take pharmaceuticals that cannot be dispensed prior to the expiration date.
2. Charitable donation - pharmaceutical products may be donated to a reputable organization for use in a third world country.
3. Contract with a registered medical waste transporter - (or obtain a mail away pharmaceutical container) for disposal of all waste pharmaceuticals, due to the complexity of determination requirements. If a generator prefers to make a hazardous waste determination, documentation of the determination results for each waste pharmaceutical must be maintained on-site. ■

Economize, Organize!

A Common Storage Facility case study (continued from page 3)

The success of this system can be attributed to:

- Dedication and patience of managers of the CSF.
- System design and training by the medical waste transporter.
- Cooperation of the occupants of the building.

Kudos to you who continue to comply with the law and adopt cost-effective solutions! ■

Surf The Web!

Web sites and telephone numbers of interest

County of Orange Medical Waste Program
www.oc.ca.gov/hca/regulatory/medwaste.htm

This newsletter is also available at our website
www.oc.ca.gov/hca/newslett.htm

California Department of Health Services
Medical Waste Program
www.dhs.cahwnet.gov/ps/ddwem/environmental/emb/medwasteindex.htm

This site has links to the Medical Waste Management Act (Health & Safety Code), Lists of Off-site Treatment Facilities, Trauma Scene Practitioners, Medical Waste Transporters, Alternative Treatment Technologies and Self-Assessment Manual for Proper Management of Medical Waste.
(916) 327-6904

National Institutes of Health
<http://www.nih.gov>

Centers for Disease Control and Prevention
<http://www.cdc.gov>

American Biological Safety Association
<http://www.absa.org>

Federal Medical Waste Site
www.epa.gov/epaoswer/other/medical/index.htm

California Occupational Safety & Health
http://www.dir.ca.gov/occupational_safety.html
Worker Safety - (714) 393-0145



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Keeping Sharp is produced by the Environmental Health Medical Waste Team. Additional copies can be acquired by writing to the mailing address, or calling the phone number, listed below.

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Page layout and design services provided by Public Information & Communications, Desktop Publishing



Graphic Design and Layout produced by the HCA Desktop Publishing Unit - a part of HCA Program Services

Web sites/telephone numbers (continued)

California Environmental Protection Agency/
Department of Toxic Substances Control
<http://www.dtsc.ca.gov> or phone (916) 388-2866

South Coast Air Quality Management District
<http://www.aqmd.gov> or phone (909) 396-2000

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